

U.S. Patent Application Serial No. 10/667,600
Response filed November 24, 2004
Reply to OA dated August 25, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1 (currently amended): A hair iron device, comprising:
2 a hair iron main body to hold hair with a first iron and a second iron oscillatable to open and
3 close to set the hair, and plural small protruding portions disposed on corresponding faces of the first
4 and second irons which mutually come close to each other and engage each other in a closed state
5 of the first iron and the second iron to hold the hair ~~as to mutually engage~~ , wherein
6 the small protruding portions on the face of the first iron are arranged in a plurality of rows
7 surrounding and spaced apart from a first central portion of the face of the first iron, the first central
8 portion forming a plurality of steam jetting holes having a first cross-sectional area, and
9 the small protruding portions on the face of the second iron are arranged in a plurality of rows
10 surrounding and spaced apart from a second central portion of the face of the second iron, the second
11 central portion forming a plurality of steam suction holes having a second cross-sectional area, the
12 first cross-sectional area being smaller than the second cross-sectional area.

1 Claim 2 (original): The hair iron device as set forth in claim 1, wherein the small protruding
2 portion is pyramidal.

1 Claim 3 (original): The hair iron device as set forth in claim 1, wherein the small protruding
2 portion is a regular pyramid.

1 Claim 4 (currently amended): A hair iron device having a hair iron main body to hold hair
2 with a first iron having a face with protruding portions and a second iron having a face with
3 protruding portions to set the hair comprising a construction in which the hair iron main body has
4 electric heaters each of which is embedded in the first iron and the second iron respectively, and
5 steam is jetted out of the first iron and sucked by the second iron , wherein

6 the protruding portions on the face of the first iron are arranged in a plurality of rows
7 surrounding and spaced apart from a first central portion of the face of the first iron, the first central
8 portion forming a plurality of steam jetting holes having a first cross-sectional area, and

9 the protruding portions on the face of the second iron are arranged in a plurality of rows
10 surrounding and spaced apart from a second central portion of the face of the second iron, the second
11 central portion forming a plurality of steam suction holes having a second cross-sectional area, the
12 first cross-sectional area being smaller than the second cross-sectional area.

1 Claim 5 (currently amended): A hair iron device having a hair iron main body to hold hair
2 with a first iron and a second iron to set the hair comprising a construction in which plural small
3 protruding portions are disposed on corresponding faces which mutually come close in a closed state
4 of the first iron and the second iron to hold the hair ~~[[as]]~~ and to mutually engage, ~~[[a]]~~ steam-jetting
5 ~~hole is~~ holes are disposed on the corresponding face of the first iron, ~~[[a]]~~ steam suction ~~hole is~~ holes
6 are disposed on the corresponding face of the second iron, and an electric heater is embedded in each
7 of the first iron and the second iron at a position spaced apart from the small protruding portions,
8 wherein

9 the small protruding portions on the face of the first iron are arranged in a plurality of rows
10 surrounding and spaced apart from a first central portion of the face of the first iron, the first central
11 portion forming the steam-jetting holes having a first cross-sectional area, and

12 the small protruding portions on the face of the second iron are arranged in a plurality of rows
13 surrounding and spaced apart from a second central portion of the face of the second iron, the second
14 central portion forming the steam suction holes having a second cross-sectional area, the first cross-
15 sectional area being smaller than the second cross-sectional area.

1 Claim 6 (original): The hair iron device as set forth in claim 5, wherein the steam-jetting
2 hole is positionally dislocated from the steam suction hole when observed in a direction at right
3 angles with the corresponding faces in the closed state in which the corresponding faces mutually
4 come close.

1 Claim 7 (original): The hair iron device as set forth in claim 4 or claim 5, wherein the first
2 iron is positioned on a scalp side and the second iron is positioned on an outer side in use.

1 Claim 8 (original): The hair iron device as set forth in claim 5, wherein the small protruding
2 portion is pyramidal.

1 Claim 9 (original): The hair iron device as set forth in claim 5, wherein the small protruding
2 portion is a regular pyramid.

1 Claim 10 (original): The hair iron device as set forth in claim 4, 5, or 6, wherein a steam
2 valve, which becomes closed in an open state of the first iron and the second iron and becomes open
3 in the closed state of the first iron and the second iron, is attached to the hair iron main body.

1 Claim 11 (original): The hair iron device as set forth in claim 4, 5, or 6, wherein a suction
2 switch, which is switched off in an open state of the first iron and the second iron and switched on
3 in the closed state of the first iron and the second iron, is attached to the hair iron main body, and a
4 suction means connected to the hair iron main body through a suction tube is switched on and off
5 by the suction switch.

1 Claim 12 (original): The hair iron device as set forth in claim 11, wherein a steam valve,
2 which becomes closed in the open state of the first iron and the second iron and becomes open in the
3 closed state of the first iron and the second iron, is attached to the hair iron main body, and a drain
4 tube to send drain from the steam valve to a steam trap is provided.

1 Claim 13 (original): The hair iron device as set forth in claim 11, wherein a steam valve,
2 which becomes closed in the open state of the first iron and the second iron and becomes open in the
3 closed state of the first iron and the second iron, is attached to the hair iron main body, a drain tube
4 to return drain from the steam valve to a boiler is provided, a circulation, in which the steam from
5 the boiler is supplied to the steam valve through a steam-supplying tube connecting the boiler to the
6 steam valve and returned to the boiler through the drain tube, is always conducted when the steam
7 valve is closed, and the steam of the boiler is jetted out of the hair iron main body when the steam
8 valve is open.

* * * *